Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A process for packaging a microscopic structure, said process comprising the steps of:

assembling a microscopic structure substantially enclosed within a cavity defined by a shell having at least one throughhole extending therethrough in communication with the cavity; and

~~applying a molten material to fill the at least one throughhole wherein the molten material subsequently solidifies to yield a hermetic pressure seal~~ depositing a meltable material onto at least an exterior portion of the shell proximate the at least one hole; and

selectively heating the meltable material for a sufficient time in an area proximate to and surrounding said at least one throughhole or via to a temperature sufficient to generate the molten material, whereby the molten material flows partially into and blocks the span of the at least one hole prior to cooling and solidification to yield the hermetic pressure seal.

Claim 2 (Original): The process for Claim 1, wherein assembling step further comprises the steps of:

forming the microscopic structure on a substrate;

depositing a capping layer on said microscopic structure;

depositing a support layer on said capping layer;

forming at least one hole through the support layer in communication with the capping layer; and

removing the capping layer through the at least one hole to yield the cavity defined by said support layer providing said shell.

Claim 3 (Original): The process for Claim 1, wherein the shell is composed of a dielectric material.

Claim 4 (Original): The process for Claim 3, wherein the shell material is a nitride material.

Claim 5 (Original): The process for Claim 2, wherein the capping layer is composed of a material removable through etching selected from the group consisting of an oxide, a photoresist material, and a polyamide material.

Claim 6 (Canceled).

Claim 7 (Currently Amended): The process for Claim ~~6~~ 1, wherein the meltable material is a metal.

Claim 8 (Original): The process for Claim 7, wherein the metal is selected from the group consisting of aluminum, gold, copper and combinations thereof.

Claim 9 (Original): The process for Claim 1, wherein the microscopic structure forms at least part of a MEMS device.

Claim 10 (Original): The process for Claim 1, further comprising the step of outgassing the microscopic structure and support layer prior to the applying step.

Claim 11 (Currently amended): The process for Claim ~~6~~ 1, wherein the heating step further comprises the step of applying a laser to the meltable material for a sufficient time to generate the molten material.

Claim 12 (Original): The process for Claim 11, wherein the energy density of the laser ranges from about 1.5 J/cm^2 to 3.5 J/cm^2.

Claim 13 (Original): The process for Claim 11, wherein the laser is applied as a single pulse.

Claim 14 (Original): The process for Claim 13, wherein the single pulse has a pulse duration of from about 10 nanoseconds to 100 nanoseconds.

Claim 15 (Original): The process for Claim 1, wherein the aspect ratio of the at least one hole is at least 0.5.

Claim 16 (Currently Amended): The process for Claim ~~6~~ 1, wherein the meltable material is deposited in sufficient amounts to achieve a thickness of at least 50% of the diameter of the at least one hole.

Claim 17 (Original): The process for Claim 1, wherein the shell has a higher melting point than the melting point of the molten material.

Claim 18 (Original): A process for packaging a microscopic structure, said process comprising the steps of:

forming shell around a microscopic structure, said shell having a cavity in which said microscopic structure resides;

forming at least one throughhole or via in said shell;

depositing a meltable material onto at least an exterior portion of the shell proximate the at least one throughhole; and

selectively heating the meltable material proximate the at least one throughhole to a temperature sufficient to locally melt the material for a sufficient time to cause the molten material to at least partially flow into and block the span of the at least one throughhole prior to the material cooling and solidifying to yield a hermetic pressure seal.

Claim 19 (Original): A process for packaging a MEMS device, said process comprising the steps of:

forming a MEMS device on a substrate;

depositing a capping layer of sacrificial material on said MEMS device;

depositing a support layer on said capping layer;

forming a plurality of throughholes or vias through the support layer in communication with the capping layer;

removing the capping layer through at least one of said plurality of throughholes to yield a microcavity defined by said support layer to provide a shell around said MEMS device;

depositing a metallic material on the exterior of the support layer in a manner leaving said metallic material surrounding but not covering said plurality of throughholes; and

increasing the temperature of the metallic material proximate selective ones of said plurality of vias, respectively, for a sufficient time to cause said metallic material to melt and partially flow into, solidify, and block adjacent ones of said plurality of vias.

Claim 20 (Original): A process for hermetically packaging a microscopic structure, the process comprising the steps of:

depositing a capping layer of sacrificial material patterned by lithography over the microscopic structure supported on a substrate;

depositing a support layer of a dielectric material patterned by lithography over the capping layer, providing a plurality of vias through the support layer by lithography;

removing the capping layer via wet etching to leave the support layer intact in the form of a shell having a cavity occupied by the microscopic structure;

depositing a metal layer over the support layer that is thick enough to provide a barrier against gas permeation, but thin enough to leave the vias open; and

selectively applying under high vacuum a laser beam to the metal proximate each via for a sufficient period of time to melt the metal for sealing the via.

Claim 21 (Withdrawn): A hermetically sealed package for a microscopic device or structure comprising:

a substrate upon which said device is mounted; and

a shell of dielectric material deposited about said device with a cavity formed within said shell, the cavity surrounding and leaving said device free for performing necessary mechanical movement.

Claim 22 (Withdrawn): The package of Claim 21, further including:

a metal layer deposited over said shell for enhancing gas impermeability.

Claim 23 (Withdrawn): The package of Claim 21, wherein said shell includes:

at least one via(s) formed through a wall portion thereof to permit degassing of said cavity or the injection of a particular gas into said cavity.

Claim 24 (Withdrawn): The package of Claim 23, further including:

a metal layer deposited over said shell and at least one via(s) in a manner sealing said via, and for enhancing gas impermeability.

Claim 25 (Withdrawn): The package of Claim 22, wherein said metal is selected from the group consisting of copper, aluminum, and gold.

Claim 26 (Withdrawn): The package of Claim 24, wherein said metal is selected from the group consisting of copper, aluminum, and gold.